REMARKS

The non-final Office Action was issued on pending claims 6-15. In this Response, claims 6 and 11 have been amended, and no claims have been added or canceled. Thus, claims 6-15 are pending in the application.

Specification

In Office Action paragraph 1, a substitute specification excluding the claims was required. In response, enclosed is a Substitute Specification, which includes the amendment to the specification entered in the Preliminary Amendment submitted with the filing of the application. The Substitute Specification contains no new matter. Also, a marked-up copy of the Substitute Specification showing the amendments made is also enclosed.

Thus, Applicants submit that the specification is in condition for allowance.

Claim Rejection – 35 U.S.C. § 102

In Office Action paragraph 2, claims 6-15 were rejected under 35 U.S.C. § 102(e) as being anticipated by An et al, U.S. Patent No. 6,031,904. Applicants respectfully disagree.

Claims 6 and 11 have been amended to clarify the claims. Applicants submit that the amendments merely clarify the claims and do not further narrow the claims or surrender subject matter.

Referring to claim 11, Applicants' claimed invention pertains to a system for administering performance features for a telephone subscriber. Claim 11 has been amended to clarify the first and second switching-oriented applications. More specifically, claim 11 calls for the second telephone exchange to contain a first switching-oriented application that allows the Internet server to communicate with the data terminal equipment via the Internet connection. Fig. 1 shows one example of this claimed feature of Applicants' invention. A second telephone exchange (LE2) contains a first switching-oriented application (VTAS) which allows the Internet server (WWW-S) to communicate with the data terminal equipment (TLPC) via the Internet connection. The first switching-oriented application (VTAS) communicates with the data

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terminal equipment (TLPC) by a TCP/IP/PPP protocol, for example. Claim 11 further calls for a second switching-oriented application that allows the Internet server to communicate with the first telephone exchange via the telecommunications connection. Referring to the example of Applicants' invention in Fig. 1, the second telephone exchange (LE2) contains a second switching-oriented application (VTALE) that allows the Internet server (WWW-S) to communicate with the first telephone exchange (LE1) via the telecommunications connection (TN). The second switching-oriented application (VTALE) can communicate with the first telephone exchange (LE1) by signaling software represented in blocks No. 7CC, for example. Claim 11 further calls for the first switching-oriented application to communicate with the second switching-oriented application. Referring to the example of Applicants' invention in Fig. 1, the first switching-oriented application (VTAS) can communicate with the second switching-oriented application (VTALE) by an ISDN CC connection, for example.

In this manner, the data terminal equipment (TLPC) communicates with the Internet server (WWW-S) via the first switching-oriented application (VTAS) which then communicates with the second switching-oriented application (VTALE) on the second telephone exchange (LE2). The second switching-oriented application (VTALE) then communicates with the first telephone exchange (LE1) by the telecommunications connection.

Referring to claim 6, claim 6 has been amended to also clarify the method for administering performance features for a telephone subscribed by using the first switching-oriented application to effect an Internet connection between the data terminal equipment and the Internet server, and the second switching-oriented application to effect a telecommunications connection between the Internet server and the telephone exchange, in which the first switching-oriented application communicates with the second switching-oriented application.

Applicants respectfully submit that An et al. does not disclose or suggest Applicants' claimed invention. Regarding claim 11, An et al. does not disclose or suggest the structure of Applicants' first and second switching-oriented applications at the second telephone exchange. Further, An et al. does not disclose or suggest a first switching-oriented application at the second telephone exchange which allows the Internet server to communicate with the data terminal equipment via the Internet connection and the second switching-oriented application that allows

the Internet server to communicate with the first telephone exchange via the telecommunications connection, and wherein the first switching-oriented application communicates with the second switching-oriented application. Similarly, Applicants respectfully submit that An et al. does not disclose or suggest the method for administering performance features for a telephone subscriber, as claimed in claim 6. Particularly, An et al. does not disclose or suggest the step of effecting an Internet connection between the data terminal equipment and an Internet server through the use of an Internet browser and a first switching-oriented application. An et al. further does not disclose or suggest the step of effecting a telecommunications connection between the Internet server and the telephone exchange by using a second switching-oriented application which communicates with the first switching-oriented application, wherein communication between the data terminal equipment and the telephone exchange is ultimately established for the administration of the performance features.

Thus, Applicants respectfully submit that the § 102(e) rejection has been overcome and request that it be withdrawn.

CONCLUSION

For the foregoing reasons, Applicants respectfully submit that the patent application is in condition for allowance and request that a notice of allowance be issued.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with Markings to Show Changes Made**."

Also, enclosed is a marked-up version of the changes made to the specification by the Preliminary Amendment to form the Substitute Specification, which is also captioned "**Version with Markings to Show Changes Made**."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

6.   (Amended)   A method for administering performance features for a telephone subscriber, the method comprising the steps of:

providing data terminal equipment with a display at a location undertaking the administration of the performance features;

employing a telephone exchange containing a data base pertaining to the performance features;

effecting an Internet connection between the data terminal equipment and an Internet server through the use of an Internet browser <u>and a first switching-oriented application</u>; and

effecting a telecommunications connection between the Internet server and the telephone exchange <u>by using a second switching-oriented application which communicates with the first switching-oriented application</u>, wherein communication between the data terminal equipment and the telephone exchange is ultimately established for the administration of the performance features.

11.   (Amended)   A system for administering performance features for a telephone subscriber, comprising:

data terminal equipment with a display at a location undertaking the administration of the performance features;

a first telephone exchange containing a data base pertaining to the performance features;

an Internet connection connecting the data terminal equipment to an Internet server through the use of an Internet browser;

a telecommunications connection connecting the Internet server to the first telephone exchange, wherein communication between the data terminal equipment and the first telephone exchange is ultimately established for the administration of the performance features; and

a second telephone exchange containing both a node for the Internet and a switching technology apparatus, wherein the Internet server is a component part of ~~a log on~~ the node, and wherein the second telephone exchange further contains a first switching-oriented application that <u>allows the Internet server to communicate with the data terminal equipment via the Internet connection and a second switching-oriented application that allows the Internet server to communicate with the first telephone exchange via the telecommunications connection, and wherein the first switching-oriented application communicates with the</u> ~~corresponds to a~~ second switching-oriented application ~~that supplements the switching technology apparatus~~.

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S U B S T I T U T E   S P E C I F I C A T I O N

TITLE

5 **METHOD AND ARRANGEMENT FOR ADMINISTERING PERFORMANCE FEATURES FOR TELEPHONE SUBSCRIBES**

BACKGROUND OF THE INVENTION

Field of the Invention

The invention is directed to <u>both a method and a system</u> for administering

10 performance features for telephone subscribers ~~and is also directed to an arrangement for the implementation of this method.~~ <u>wherein such administration occurs via a personal computer in communication with an Internet server which is, in turn, in communication with a telephone exchange which includes a data base pertaining to the desired performance features via a telephone network.</u>

15 **Description of the Prior Art**

A multitude of performance features ar<u>e presently </u>made available ~~at present~~ to telephone subscribers<u>, wherein such performance features reside</u> in the telephone exchange to which these are connected.   Usually, the administration of such performance features~~, i.e.~~ <u>(i.e., the</u> establishment and, potentially, modification thereof~~,~~

20 ~~ensues proceeding from~~<u>) occurs via</u> a central location responsible for a plurality of telephone ~~exchanges, what~~ <u>exchanges—what</u> is referred to as an O&M center (Operation & Maintenance).   For a plurality of performance features, however, the possibility <u>also must</u> ~~also~~ be established that the subscriber himself can influence an administration of performance features.

25 Up ~~to~~<u>until </u>now, one has proceeded ~~such~~ in this context <u>such </u>that the subscriber ~~informs~~ <u>informed </u>the telecommunications administration of his establishment or modification wish for a performance feature, and the corresponding administrative jobs ~~are~~ <u>were</u> subsequently implemented by the service personnel in the appertaining telephone exchange.   This, of course, is ~~a matter of~~ a personnel-intensive procedure

30 that, moreover, ~~also~~ involves long waiting times until the execution of the customer wishes.

For performance features for which this cannot be accepted, there is ~~therefore~~ the possibility that the telephone subscriber can activate and, potentially, modify

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performance features proceeding from the terminal equipment by inputting numerical combinations. The procedures required for this purpose, however, are complicated and not very user-friendly because of the plurality of performance features coming into consideration.

5   The object of the present invention is, therefore ~~comprised in specifying,~~ is to specify a method that makes the administration of performance features less time-consuming and more comfortable for telephone subscribers compared to prior conditions.

~~For achieving this object, such a method comprises the features of the~~

10   ~~characterizing part of patent claim 1.~~ **SUMMARY OF THE INVENTION**

~~In accord therewith,~~ In accordance with the present invention, therefore the communication required for such an administration between a location undertaking the administration and the telephone exchange wherein the data base pertaining to the performance features is contained is therefore sequenced upon utilization of an Internet

15   connection of ~~a~~ data terminal equipment, which is provided with a display ~~and,~~ working with an Internet browser that is located at the site of the location undertaking the administration. An Internet server is established for this purpose, ~~this being~~ which is capable of communicating, on the one hand, with the data terminal equipment via an Internet connection and, on the other hand, ~~being capable of communicating with said~~

20   the telephone exchange via a telecommunications connection.

A graphic user interface is, thus, made available for the administration of performance features, this graphic user interface being particularly predestined for such jobs.

The advantages of the invention particularly take effect in the above-discussed

25   application wherein the performance feature administration is to be undertaken by the telephone subscriber himself~~, as recited in patent claim 2~~. The administration ~~can,~~ thus, can be undertaken proceeding from the telephone subscriber's personal computer, ~~and~~ wherein the offering of a special telephone terminal equipment is not required.

30   However, the inventive method for the exchange administration including the administration of subscriber performance features ~~can,~~ also can be advantageously applied from a service ~~center, said~~ center—the O&M Center.

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According to patent claims 3 and 4 In an embodiment, the access of the data terminal equipment to the Internet can ensue may occur via the telephone network, which will usually will be the case when the administration ensues by the telephone subscriber or, on the other hand, ensues, or occurs via a data line connection, which is more likely to be the case when the administration is undertaken proceeding from a service center.

Claim 5 recites a expedient arrangement for the implementation of the inventive method. Said Internet server, accordingly, In a further embodiment, the Internet server is a component part of a log on a node for the Internet integrated into a telephone exchange. In order to enable a communication with the operations and maintenance technology of this telephone exchange, the Internet server contains an operations and maintenance application that corresponds to an operations and maintenance application with which the operations and maintenance technology of said the telephone exchange is supplemented.

The invention is explained in greater detail below with reference to an exemplary embodiment and to a figure.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Preferred Embodiments and the Drawings.

DESCRIPTION OF THE DRAWINGS

Fig. 1 schematically illustrates the The figure mainly serves the purpose of explaining the conditions in an administration of subscriber performance features by the a telephone subscriber himself. in accordance with the teachings of the present invention.

It DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 shows a telephone network TN which also includes both a first local telephone exchange LE1 and a second local telephone exchange LE2. The connection of a telephone terminal equipment TLF and of a personal computer TLPC of a telephone subscriber via a subscriber line TLA is shown at the local exchange LE1.

A log on node POP into the Internet is indicated as a component part of the local exchange LE2. The personal computer TLPC is intended to have access to the telephone network T via a modem (not shown) and, from the latter, to the Internet via

said the log on node POP. The subscriber, thus, should thus have a browser, for example a WWW browser (Worldwide Web), available; i.e., a possibility and a comfortable graphic interface for accessing and for displaying data available in the Internet. For illustrating such an Internet connection, blocks having fields TCP, IP and

5   PPP are shown at the personal computer of the subscriber TLPC and at the log on node POP, these indicating. These blocks indicate the protocols of transmission control protocol (TCP), Internet Protocol (IP) and Point-to-Point Protocol (PPP) employed given a communication via the Internet.

The switching technology software critical for the creation of telephone

10   connections is referenced VT at the local exchanges LE1 and LE2. Moreover, the subscriber data base in which the entries for the subscriber performance features are also located is indicated as TB at the local exchange LE1.

A specific Internet server, a WWW server here, belongs to the Internet log on node POP shown as a component part of the local exchange LE2. This server is

15   fashioned configured such that, on the one hand, it can communicate with an Internet subscriber via an Internet connection, i.e. (i.e., upon employment of said the protocols TCP/IP, i.e. with the personal computer TLPC in this case,) and, on the other hand, can it also can exchange information with the local exchange LE1 via a telephone connection. In order to enable this, this server, as indicated in the figure Fig. 1, is

20   equipped with a switching-oriented application VTAS that corresponds to a switching-oriented application VTALE by which the switching technology VT of the local exchange LE2 is expanded.

The figure Fig. 1 also shows a service center O&M (Operation and Maintenance) at which a data terminal equipment PC is likewise shown. This service

25   center is in communication here with the log on node POP via a data line. However, it would also be conceivable that this service center, like the personal computer TLPC, reaches the long log on node POP via a line of the telephone network, as it also would also be conversely possible that the connection of the personal computer TLPC of the telephone subscriber (differing from that shown) does not have access to the log on

30   node POP and, thus, to the specific server WWW-s of the Internet via the telephone network but via a data line. Broken connecting lines in the figure Fig. 1 also indicate the possibility that the access of the personal computer (TLPC) of a telephone

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subscriber or of a service center (O&M-PC) ~~ensues~~ <u>occurs</u> via connecting paths of the Internet INT.

When an administration of performance features is to be undertaken proceeding from the telephone subscriber, ~~whereby~~ <u>wherein</u> it will be a matter of activation or deactivation in most instances (such as, for example, the performance features of "do-not-disturb" and "display telephone numbers of outgoing ~~calls", or, on the other hand,~~ <u>calls," or</u> modify inputs come into consideration such as given the performance feature of "call ~~forwarding",~~ <u>forwarding,"</u> then, in conformity with the inventive method, the telephone subscriber sets up an Internet connection of his personal computer TLPC via the telephone network and the log on node POP. The telephone number of the connection to be administered, ~~i.e.~~ <u>(i.e.,</u> his telephone number,<u>)</u> is to be communicated via his WWW browser to the WWW server WWW-s belonging to the log on node <u>POP</u>, being communicated thereto in the form of an Internet message.

Due to ~~said~~ <u>the</u> switching-oriented application VTAS, this server is in the position to forward this telephone number via the switching-oriented application VTALE to the switching technology VT of the local exchange LE2. This can occur, for example, via an ISDN-D channel message when the log on node POP is connected to the local exchange LE2 in the form of an ISDN primary connection. Under the control of the switching-oriented application VTALE or, respectively, of the switching technology VT, a connection is set up via the telephone network T to the local exchange LE1 that can be recognized based on the telephone number and at which the inquiring telephone subscriber has his personal computer TLPC connected. The communication of this message can thereby ~~ensue~~ <u>occur</u>, for example, in the signaling channel according to the signaling system No. 7 of the telephone network<u>;</u> see the connection arrow between the blocks No. 7CC at the two local exchanges symbolizing the signaling software. The telephone subscriber is thus in the position, upon utilization of his WWW browser that offers him a corresponding comfortable user interface, to ~~communication~~ <u>communicate</u> with the data base of his own telephone exchange LE. The data exchange between PC and the WWW server thereby ~~ensues~~ <u>occurs</u> in the form of the exchange of data packets according to the Internet protocol (IP), ~~whereby~~ <u>wherein</u> a conversion for continuing this communication via the

telephone network respectively ~~ensues~~ <u>occurs</u> on the basis of the switching-oriented application VTAS.

As already indicated above, the inventive method is not limited to the performance feature administration of telephone subscribers<u>,</u> but ~~can~~ also <u>can</u> be advantageously utilized for switching center administration including subscriber administration proceeding from the service center when it is ~~thus~~ a matter <u>of</u>, for example, ~~of~~ the establishment of new telephone connections and the like.

~~Abstract~~ <u>Indeed, although the present invention has been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the present invention as set forth in the hereafter appended claims.</u>

~~Method and Arrangement for Administering Performance Features for Telephone Subscribers~~ **ABSTRACT OF THE DISCLOSURE**

~~The administration of~~ A method and system for administering performance features for telephone ~~inscribers ensues proceeding from a PC (TLPC)~~ subscribers wherein such administration of performance features occurs via a PC of the subscriber that is in communication, via an Internet connection, with an Internet server ~~(WWW s)~~ that, in addition to communicating with the PC, ~~can~~ also can communicate via the telephone network ~~(TN)~~ with the telephone exchange ~~(LE1)~~ in which the data base ~~(TB)~~ pertaining to the performance features is located.